(FILE 'HOME' ENTERED AT 17:20:35 ON 23 SEP 2003)

FILE 'BIOSIS, MEDLINE, INPADOC, CAPLUS' ENTERED AT 17:20:46 ON 23 SEP 2003

L1 78 FIBRIN AND MOLD?

L2 66 DUPLICATE REMOVE L1 (12 DUPLICATES REMOVED)

=>

L Number	Hits	Search Text	DB	Time stamp
1	2	(fibrin adj3 gel) same mold	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/23 17:11
2	90	fibrin same mold	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/23 17:12
3	8	(fibrin same mold) and tooth	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/23 17:12

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=> d his

     (FILE 'HOME' ENTERED AT 12:58:46 ON 10 SEP 2003)

     FILE 'BIOSIS, MEDLINE, INPADOC, CAPLUS' ENTERED AT 13:03:44 ON 10 SEP 2003
L1             0 (PLATELET GEL) AND SHAP?
L2            13 (PLATELET GEL) AND FORM?
L3            10 DUPLICATE REMOVE L2 (3 DUPLICATES REMOVED)
L4             0 (PLATELET GEL) AND MOLD?
L5           231 PLATELET AND MOLD?
L6           203 DUPLICATE REMOVE L5 (28 DUPLICATES REMOVED)

=> fibrin and gel and mold?
L7             7 FIBRIN AND GEL AND MOLD?
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L10 ANSWER 16 OF 53 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:583135 CAPLUS
DN 131:204668
TI Blood **platelets** impregnated in matrixes for promotion of wound healing
IN Shinmura, Kazuo
PA Sekisui Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11246420	A2	19990914	JP 1998-45389	19980226
PRAI	JP 1998-45389		19980226		

AB Wound healing promoting compns. comprise blood **platelets** impregnated or adhered to matrixes, such as collagen gels or **fibrin gels**. The compns. further comprise cytokines, cell growth factors, or stimulants. Bovine blood **platelets** were suspended in an acid-sol. collagen soln. and gelled at a low temp. in microplates.

L3 ANSWER 9 OF 10 MEDLINE on STN
AN 79155848 MEDLINE
DN 79155848 PubMed ID: 431234
TI [A method of suture-free anastomosis of nerve transplantation is being reported, using facial nerve as the example (author's transl)]. Zur Technik der nahtfreien Anastomosierung bei extratemporalen Uberbruckungsplastiken des N. facialis.
AU Fischer H
SO LARYNGOLOGIE, RHINOLOGIE, OTOLOGIE, (1979 Feb) 58 (2) 154-6. Journal code: 7513628. ISSN: 0340-1588.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 197906
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790626
AB After microsurgery preparation, the endings of the nerve trunk, which have been freed from epineurium, are approxiamated on top of a gelatin **platelet** (**gel** foam) which has been soaked in a nutrient solution. The gelatin platet is then **formed** like a tube and wrapped around the ends of the anastomosis. Using this procedure, suture-induced reactions in the vicinity of the anastomosis are prevented. The connection is sufficiently firm so as to withstand tension incurred in chewing and in movement of the head. Additionally, the gelatin coating prevents early onset of fibrosis, which as a process is normally induced by the surrounding tissues onto transplants. Simultaneously, nutrition of the transplant is guaranteed during the first post-operative days. In all cases operated hitherto, good to satisfactory return of function has been observed. The earliest onset of function-return was observed at four (4) months after the operation and the latest completion occurred at eighteen (18) months. Thus far, no negative results have been observed using this method.

L2 ANSWER 55 OF 66 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1952:17905 CAPLUS
DN 46:17905
OREF 46:3111g-i
TI Preparation of **fibrin** products
IN Ferry, John D.; Morrison, Peter R.
PA United States of America, as represented by the Secy. of War; Official Gaz.
SO 342
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 507903		19500000	US	

AB **Fibrin** products are made from fibrinogen obtained from blood plasma as follows: blood with citrates added is centrifuged, and the plasma cooled to 0.degree. to -3.degree.; the pH is adjusted to 6.0-7.8, the ionic strength to 0.05, and EtOH added to ppt. fibrinogen 45-65%. The ppt. dissolved in Na citrate soln. at pH 5.9-6.7 is frozen, dried, and purified by redissolving in Na citrate soln. at pH 6.3 and repptg. from an equal vol. of EtOH at -3.degree. (80-90% fibrinogen). This ppt. is dissolved in Na citrate buffer of ionic strength 0.3 and pH 6.3, frozen and dried, to yield a stable powder storable for long periods. From this powder clots are prepd. as follows: to an aq. soln. of the powder at room temp., with pH 6.0-6.5 and ionic strength 0.2-0.5, is added thrombin, in amt. to make a final concn. of 0.1-1.0 unit/cc., and the soln. transferred to a **mold**; when the clot is formed, water is removed by pressing between absorbent surfaces for 1-24 hrs. at 1/2 lb./sq. in. pressure. The **fibrin** film may be plasticized with glycerol or other polyhydric alc.

L2 ANSWER 50 OF 66 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1970:502072 CAPLUS
DN 73:102072
TI Cross-linked **fibrin** prosthesis
IN Gerendas, Mihaly
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3523807	A	19700811	US 1966-596754	19661125
PRAI	US 1966-596754		19661125		

AB A synthetic absorbable prosthetic appliance for insertion into an animal body is made by clotting blood plasma by the addn. of CaCl2 to form **fibrin**, removing the **fibrin** from the plasma, forming a powder of the **fibrin**, mixing the **fibrin** with the H2O, **molding** the mixt. at 100 to 600 kg/cm2 at 100 to 150.degree. to form the shaped appliance and treating it with a bath contg. from 0.5 to 3% HCHO, 30 to 70% EtOH, and 10 to 40% of glycerin. The clotted **fibrin** may be mixed with myosin, actin, collagen, elastin or mixts. of these.

L2 ANSWER 43 OF 66 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1980:153081 CAPLUS
DN 92:153081
TI Properties and applications of Bioplast, an absorbable surgical implant material from **fibrin**
AU Kerenyi, Geza
CS Novex Co. Ltd., Budapest, H-1364, Hung.
SO Plastics in Medicine and Surgery (1979), 3rd., Paper No. 4, 7 pp.
CODEN: PMSUDU; ISSN: 0144-8714
DT Journal
LA English
AB Bioplast [60604-93-5] is the only com. available absorbable implant material. Compression **molded** from **fibrin**, it is a yellow, translucent and flexible material which is thermally stable below 170.degree.C. Its mech. strength depends on glycerol content. Crosslinking with HCHO reduces swelling and digestibility. Bioplast is nonantigenic and capable of being absorbed by polymorphonuclear digestive action. The nontoxic metabolites are eliminated via the kidneys while the site is invaded by host tissue.

LEVEL 1
AN 34629879 INPADOC UP 20001017 UW 200041
TI METHOD OF MAKING AN INTRALUMINAL STENT
IN DINH, THOMAS Q.; TUCH, RONALD J.; DROR, MICHAEL
INS DINH THOMAS Q; TUCH RONALD J; DROR MICHAEL
INA US; US; US
PA DINH, THOMAS Q.; TUCH, RONALD J.; DROR, MICHAEL
PAS DINH THOMAS Q; TUCH RONALD J; DROR MICHAEL
PAA US; US; US
DT Patent
PIT USA UNITED STATES PATENT
PI US 5510077 A 19960423
AI US 1994-306806 A 19940915
PRAI US 1994-306806 A 19940915
US 1993-79222 A2 19930617
US 1992-854118 B1 19920319
AB An intraluminal stent comprising **fibrin** treatment of restenosis is provided by a two stage **molding** process.

Fibrin gel -- advantages of a new scaffold in cardiovascular tissue engineering.

AU Jockenhoevel S; Zund G; Hoerstrup S P; Chalabi K; Sachweh J S; Demircan L; Messmer B J; Turina M

CS Clinic for Thoracic and Cardiovascular Surgery, University Hospital Aachen, Pauwelsstrasse 30, 52074 Aachen, Germany.. stjocki@yahoo.com

SO EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY, (2001 Apr) 19 (4) 424-30. Journal code: 8804069. ISSN: 1010-7940.

CY England: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200107

ED Entered STN: 20010730
Last Updated on STN: 20010730
Entered Medline: 20010726

AB OBJECTIVE: The field of tissue engineering deals with the creation of tissue structures based on patient cells. The scaffold plays a central role in the creation of 3-D structures in cardiovascular tissue engineering like small vessels or heart valve prosthesis. An ideal scaffold should have tissue-like mechanical properties and a complete immunologic integrity. As an alternative scaffold the use of **fibrin** gel was investigated. METHODS: Preliminary, the degradation of the **fibrin** gel was controlled by the supplementation of aprotinin to the culture medium. To prevent tissue from shrinking a mechanical fixation of the gel with 3-D microstructure culture plates and a chemical fixation with poly-L-lysine in different fixation techniques were studied. The thickness of the gel layer was changed from 1 to 3 mm. The tissue development was analysed by light, transmission and scanning electron microscopy. Collagen production was detected by the measurement of hydroxyproline. Injection **molding** techniques were designed for the formation of complex 3-D tissue structures. RESULTS: The best tissue development was observed at an aprotinin concentration of 20 microg per cc culture medium. The chemical border fixation of the gel by poly-L-lysine showed the best tissue development. Up to a thickness of 3 mm no nutrition problems were observed in the light and transmission electron microscopy. The **molding** of a simplified valve conduit was possible by the newly developed **molding** technique. CONCLUSION: **Fibrin** gel combines a number of important properties of an ideal scaffold. It can be produced as a complete autologous scaffold. It is **moldable** and degradation is controllable by the use of aprotinin.

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:55548 CAPLUS
DN 128:119676
TI **Fibrin**-based systems for the controlled release of medicinals
IN Royer, Garfield P.
PA Buford Biomedical, Inc., USA; Royer, Garfield P.
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9800161	A1	19980108	WO 1997-US8909	19970527
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9731431	A1	19980121	AU 1997-31431	19970527
PRAI	US 1996-653615		19960524		
	WO 1997-US8909		19970527		

AB A **fibrin**-based bioerodible matrix for the controlled release of medicinals including protein therapeutics is disclosed. A method for controlled drug release is also disclosed. A soln. contg. fibrinogen in Hepes buffer (pH 7.2) was mixed with a soln. contg. thrombin and CaCl2 in the same buffer, then a soln. contg. azo-albumin and antithrombin III/heparin was added. The resulting combination was injected into a **mold** and cured. Step-wise extrusion and slicing allowed prodn. of implantable disks.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1997:522347 CAPLUS
DN 127:203431
TI Strain hardening of **fibrin gels** and plasma clots
AU Shah, Jagesh V.; Janmey, Paul A.
CS Experimental Med. Div., Brigham Women's Hospital, Boston, MA, 02115, USA
SO Rheologica Acta (1997), 36(3), 262-268
CODEN: RHEAAK; ISSN: 0035-4511
PB Steinkopff
DT Journal
LA English
AB Biol. macromols. have unique rheol. properties that distinguish them from common synthetic polymers. Among these, fibrin has been studied extensively to understand the basic mechanisms of viscoelasticity as well as mol. mechanisms of coagulation disorders. One aspect of **fibrin gel** rheol. that is not obsd. in most polymeric systems is strain hardening: an increase in shear modulus at strain amplitudes above 10%. Fibrin clots and plasma clots devoid of **platelets** exhibit shear moduli at strains of approx. 50% that are as much as 20 times the moduli at small strains. The strain hardening of **fibrin gels** was eliminated by the addn. of **platelets**, which caused a large increase in shear storage modulus in the low strain linear viscoelastic limit. The redn. in strain hardening may result from fibrin strand retraction which occurs when **platelets** become activated. This interpretation is in agreement with recent theor. treatments of semi-flexible polymer network viscoelasticity.

L8 ANSWER 3 OF 7 MEDLINE on STN
AN 1998242791 MEDLINE
DN 98242791 PubMed ID: 9583489
TI Tissue engineered neocartilage using plasma derived polymer substrates and chondrocytes.
AU Sims C D; Butler P E; Cao Y L; Casanova R; Randolph M A; Black A; Vacanti C A; Yaremchuk M J
CS Department of Surgery, Harvard Medical School, and Massachusetts General Hospital, Boston 02114, USA.
SO PLASTIC AND RECONSTRUCTIVE SURGERY, (1998 May) 101 (6) 1580-5. Journal code: 1306050. ISSN: 0032-1052.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199805
ED Entered STN: 19980609
Last Updated on STN: 19980609
Entered Medline: 19980528
AB This study demonstrates that **fibrin** monomers can be polymerized into **moldable** gels and used for the encapsulation of isolated chondrocytes. This biologically derived scaffold will maintain three-dimensional spatial support, allowing new tissue development in a subcutaneous space. Chondrocytes isolated from the glenohumeral and humeroradioulnar joints of a calf were combined with cyroprecipitate and polymerized with bovine thrombin to create a **fibrin** glue **gel** with a final cell density of 12.5 x 10(6) cells/ml. The polymer-chondrocyte constructs were implanted subcutaneously in 12 nude mice and incubated for 6 and 12 weeks in vivo. Histologic and biochemical analysis including deoxyribonucleic acid (DNA) and glycosaminoglycan quantitation confirmed the presence of actively proliferating chondrocytes with production of a well-formed cartilaginous matrix in the transplanted samples. Control specimens from 12 implantation sites consisting of chondrocytes alone or **fibrin** glue substrates did not demonstrate any gross or histologic evidence of neocartilage formation. **Moldable** autogenous **fibrin** glue polymer systems have a potential to serve as alternatives to current proprietary polymer systems used for tissue engineering cartilage as well as autogenous grafts and alloplastic materials used for facial skeletal and soft-tissue augmentation.